

That which is Claimed:

1. A fiber reinforced cementitious material comprises:  
a conventional cementitious material and  
less than 5 pounds per cubic yard of said cementitious  
material of fibers dispersed therein, the fibers comprising a  
mixture of a thermoplastic polymer and an organometal compound  
wherein the metal of said compound being selected from the group  
consisting of Ti, Si, Zr, Al, and combinations thereof, and said  
organometal compound comprising less than 10% by weight of said  
fibers.

2. The fiber reinforced cementitious material of Claim 1  
wherein said organometal compound comprises less than 5% by weight  
of said fibers.

3. The fiber reinforced cementitious material of Claim 1  
wherein said organometal compounds being selected from the group  
consisting of titanates, silanes, zirconates, aluminates, and  
combinations thereof.

4. The fiber reinforced cementitious material of Claim 1  
wherein said organometal compounds being a silane and another

organometal compound being selected from the group consisting of titanates, zirconates, aluminates, and combinations thereof.

5. The fiber reinforced cementitious material of Claim 1 wherein said organometal compounds being a silane and a titanate.

6. The fiber reinforced cementitious material of Claim 1 wherein said organometal compounds being a silane and a zirconate.

7. The fiber reinforced cementitious material of Claim 1 wherein said organometal compounds being a silane.

8. The fiber reinforced cementitious material of Claim 1 wherein said thermoplastic polymer being selected from the group of polyolefins, polyesters, nylons, acrylics.

9. The fiber reinforced cementitious material of Claim 8 wherein said thermoplastic polymer being a polypropylene.

10. The fiber reinforced cementitious material of Claim 1 wherein said fiber being a chopped fiber.

11. The fiber reinforced cementitious material of Claim 1 wherein said fibers being randomly dispersed.

12. The fiber reinforced cementitious material of Claim 1 wherein said fibers being dispersed in aligned patterns.

13. A reinforcing fiber for cementitious materials comprising a mixture of a thermoplastic polymer and an organometal compound wherein said compound being selected from the group of titanates, silanes, zirconates, aluminates, and combinations thereof, and said organometal compound being less than 10% by weight of said fiber.

14. The fiber of Claim 13 wherein said organometal compound comprises less than 5% by weight of said fibers.

15. The fiber of Claim 13 wherein said organometal compounds being selected from the group consisting of titanates, silanes, zirconates, aluminates, and combinations thereof.

16. The fiber of Claim 13 wherein said organometal compounds being a silane and another organometal compound being selected from the group consisting of titanates, zirconates, aluminates, and combinations thereof.

17. The fiber of Claim 13 wherein said organometal compounds being a silane and a titanate.

18. The fiber of Claim 13 wherein said organometal compounds being a silane and a zirconate.

19. The fiber of Claim 13 wherein said organometal compounds being a silane.

20. The fiber of Claim 13 wherein said thermoplastic polymer being selected from the group of polyolefins, polyesters, nylons, acrylics.

21. A new use for a fiber comprising a thermoplastic polymer and organometal compound being selected from the group of titanates, silanes, zirconates, aluminates, and combinations thereof wherein said organometal compound comprises less than 10% by weight of said fiber, comprising the step of adding said fiber to a cementitious material.

22. The fiber of Claim 21 wherein said organometal compound comprises less than 5% by weight of said fibers.

23. The fiber of Claim 21 wherein said organometal compounds being selected from the group consisting of titanates, silanes, zirconates, aluminates, and combinations thereof.

24. The fiber of Claim 21 wherein said organometal compounds being a silane and another organometal compound being selected from the group consisting of titanates, zirconates, aluminates, and combinations thereof.

25. The fiber of Claim 21 wherein said organometal compounds being a silane and a titanate.

26. The fiber of Claim 21 wherein said organometal compounds being a silane and a zirconate.

27. The fiber of Claim 21 wherein said organometal compounds being a silane.

28. The fiber of Claim 21 wherein said thermoplastic polymer being selected from the group of polyolefins, polyesters, nylons, acrylics.

29. A structural element used to reinforce a cementitious material comprises:

a structural element, and  
a mixture of a thermoplastic polymer and an organometal compound wherein the metal of said compound being selected from the

group consisting of Ti, Si, Zr, Al, and combinations thereof, said organometal compound comprising less than 10% by weight of said mixture,

wherein said mixture being coated onto said element or comprising said element.

30. The structural element used to reinforce a cementitious material of Claim 29 wherein said organometal compound comprises less than 5% by weight of said fibers.

31. The structural element used to reinforce a cementitious material of Claim 29 wherein said organometal compounds being selected from the group consisting of titanates, silanes, zirconates, aluminates, and combinations thereof.

32. The structural element used to reinforce a cementitious material of Claim 29 wherein said organometal compounds being a silane and another organometal compound being selected from the group consisting of titanates, zirconates, aluminates, and combinations thereof.

33. The structural element used to reinforce a cementitious material of Claim 29 wherein said organometal compounds being a silane and a titanate.

34. The structural element used to reinforce a cementitious material of Claim 29 wherein said organometal compounds being a silane and a zirconate.

35. The structural element used to reinforce a cementitious material of Claim 29 wherein said organometal compounds being a silane.

36. The structural element used to reinforce a cementitious material of Claim 29 wherein said thermoplastic polymer being selected from the group of polyolefins, polyesters, nylons, acrylics.

37. The structural element used to reinforce a cementitious material of Claim 29 wherein said structural element being selected from the group of rebar, steel fibers, wire mesh, wire rope, and structural fibers.